NATURE'S CONJURING.

PROFESSOR PROCTOR SAYS THAT SEE ING IS NOT BELIEVING.

The Apparent Size of the Sun at the Zenith and at the Horizon-Effect of the Contrast of Colors.

[Pittsburgh Dispatch.] Seeing is believing, says the old proverb, but "seeing is deceiving" would be nearer the mark. We are deceived almost as often, perhaps quite as often as not by what we see. We are deceived

he sets look larger than he really is. I say nothing of his looking out of shape; because nature uses apparatus to produce that illusion, and the eye really But she makes the sun look swollen and huge without apparatus, though again and again we find her clever performance explained in that way. The look smaller, not larger-in just such de- spherical shell. gree as it apparently compresses him from a globe to an erg.

HOW WE ARE DECRIVED.

Nature simply takes us in when she makes us believe that the setting sun looks larger than the sun in the midheavens. Perhaps I ought rather to say, for that indeed (though it has nover yet been noticed in the books) is the true feature of the illusion. Nature deceives us by making us think the sun in the mid-heaven looks smaller than when near the horizon. Perhaps the reader thinks the statements identical. But they are not. the sun's size as he he nears the horizon than when we estimate it from his appearance high above that circle. The ason is obvious. When the sun is low we can see the aspect of the landscape, that he is much farther away than youder house or hill or tree, when he is actually on the horizon. We see that he is behind those objects; and thus we cannot imagine him to be merely a foot oneave. lengths lie all the estimates of the sun's diameter which the mind unconsciously forms when he is high in the sky. So he seems to be much larger when low.

to be able to judge whether the image of the sun in the visual field is really no larger when he is low. The eye, however, knows nothing about its visual eyer, knows nothing about its visual eyer. Hundreds of kindred illusions could be really no moved to some country with an executive government strong enough to maintain eyers. Hundreds of kindred illusions could be really no moved to some country with an executive government strong enough to maintain eyers. Hundreds of kindred illusions could be really no executive government strong enough to maintain eyers. ever, knows nothing about its visual field. The mind judges of what the eye sees in quite other ways. Here is a simple experiment to show this:

Hundrels of kindred illusions could tain order and secure the rights of property at home, and strong enough in volume might in fact be written respect a military sense to hold its own against

count a hundred. drop and look at the wall with as little drop and fooe at the wall with as little change interruption in time and as little change in the diameter of vision as possible.

There is seen as usual the compleed to be at a greater distance, is judged to be larger. EXPLAINING SOME ILLUSIONS.

explanation of the effects of thick air is gleam. This was the whole secret which very simple. The suggestion of in-creased distance, already strong when paintings of the old masters.

looks larger.

There is an illusion which affects every one at all times or so nearly stall times that a man may count on his fingers the

Look at the sky when it is clouded, and the effect produced is that of the interior of a vast hollow dome-shaped covering, nearer overhead than toward the orizon. The real cloud surface has a shape quite different from this. Instead of coming down vertically, or almost vertically, to meet the horizon all round server, it lies almost as nearly in a horizontal direction there as overhead.

THE EYE AND THE SEY. In looking at the under surface of a cloud-covered sky, we are looking at a surface almost flat throughout its whole visible extent. A water glass of the older fashion is coarsely globular in its curvature compared with the surface of clouds. tween the ground and that surface as far If the institute had left the four times as far away as the sur-face overhead is at a distance of about

than the mid-heaven sun, being really no farther away; the horizon cloud sky, though judged to be farther away than the cloud sky overhead, is not judged to be so far away as it really is, being 60 or 70 times farther than the sky overhead, it is supposed to be but three or four times, or a little more than one twen-tieth of its true relative distance.

may in some sense be compared with a conjurer who explains the trick he is about to play, yet he deceives the eye as about the manner of his performance. We know that handkerchief which we gave him to experiment upon has not been cut in half, yet we saw him cut it in half; we know he has not pounded our gold watch in a mortar, yet that is what we saw him do.

The occasions when the count in the occasions when the count in the manner of the under surface of flatness of the under surface of surface of character, the very idiosyncrasies of individuals, and above all they respected him, and during his later campaigns they had the most unboundance of the cloud's lie and separated to catually) in long parallel beds of (actually) in long parallel beds of (actually) in long parallel beds of (actually) in long parallel beds of tolerably uniform breadth and separated tolerably unifor

refracting power of the air really does | ward the time of sunset, that as the sun make the sun look egg-shaped. (He in his descending motion passed from is the original Humpty-Dumpty that above to below a layer of clouds unithe setting sun, even as the refracting only time in my life I was not only able It does affect the sun's apparent cloud looking perfectly flat though really size, but the other way, making him part of the inner surface of an immense There is a converse illusion familiar

only to baltoonists, which is to be explained in the same way. Rising high above the earth's surface in a balloon, we see the surface of the earth beneath arched into the form of an immense bowl or basin. The mind refuses to admit illustrious British soldier. thought that the exceedingly minute depression of the visible

in diameter between which having radii uniformly increasing, so fare of mankind. The torrent of anarfameter which the mind unconsciously tant. Athwart these, about midway because to be much larger when low.

But just here the thoughtful reader ill perhaps urge that the eye ought still.

This line will appear curved. If a series billity as a nation rests. With its destruction will perhaps urge that the eye ought still of equi-distant waved lines are drawn hundreds of millions of money now in-

ple experiment to show this:

In good black ink draw a capital letter—preferably a round O—in strong black type on white card. Now, sitting facing a wall of uniform tink, hold or fix the card steadily in an upright position at about arm's length, and contemplate that black O as steadily 85 possible, that black O as steadily as possible, light, the gleam of metals and kindred while one with moderate haste may light, the gard illusions. All such effects are necessarrily illusory, deftly though they may be

There is seen as usual the complementary image of the letter, but it has grown much larger. If, for instance, the O is an inch in diameter and the wall is twelve times as far away as the he obtains the effect of brightness, the O is an inch in diameter and the wall is twelve times as far away as the card had been, the letter seen will be apparently a foot in diameter. The mind is not able to persuade itself that the letter has not grown suddenly larger. Yet in reality the image in the visual field is precisely the same now as it had been before. The mind is simply deceived by the effect of distance—the same object of distance—the same of the distance of the french painter of the same only object of distance of the same only object of the same of the sa the effect of distance—the same object is related of the French painter Delaroche seen of the same apparent size but supduce a fair imitation of gleaming gold in one of his historical paintings. Giving up the attempt in despair, he sent for a fiacre to take him to the gallery of Lux-So it is with the setting sun. The eye embourg, where were some paintings in sees that the sun is far off, and so judges which the desired effect had been obhim to be large, though the area of his tained, that he might learn the secret. image in the visual field is no larger (in- | But lo ! as he came down the door-steps deed measurably smaller) than when he the vellow wheels of the fiacre glowed is high above the horizon.

How is it, then, the reader may here wanted; they looked like wheels of gold ask, that the apparent, enlargement of for the nonce, though colored only with the setting sun and moon varies with the the coarse yellow used by coach painters ! condition of the air? The setting or Whence the illusion? Delaroche caught rising moon, in particular, looks much the idea in a moment, dismissed the this prove that the refractive action of the air being perthe refractive action of the air being perthe refractive action of the air being perThe yellow of the fiarce wheels was fectly well known no phenomena what-soever can prove that the action does trast with which the bright but coarse what it is not capable of doing. The yellow seemed to shine with a golden

the sun or moon is low, is strengthened if the air is thick. For the sun and moon the book fainter, and the mind recognished fainter, and the mind recognished fainter. fect of distance. Here nature uses ap- stantly deceive us in this respect. Haze paratus and makes her conjuring so and mist make objects appear far off clusive role in the field is to keep sev- the lesson the history of the American which are really near; clouds on the ho-We have in what is called "looming" which are really near; clouds on the ho-rizon appear near though really far off. rizon appear near though really far off. we have in what is called "looming rizon appear near though really lar on, pieces off a chess-board, toward one tion with it by the English-speaking thickened air. A sailor will tell you that the state of the sailor will tell you that thickened air. A sailor will tell you that a ship really looks larger when she looms | mistaken its distance is misjudged, and eice versa. But probably false effects of through fog than when the air is clear.

But if her distance is known and her apparent size measured with a sextant or dium through which objects are seen other suitable instrument it will be than in any other way. Every one who found that she looks no larger than she has travelled in regions where the air is uld look, whether the air be clear or exceptionally clear can recall illusions of this sort. At Denver I thought the into thinking the ship is farther away snow-clad hills I saw when looking down than she really is, and so judges that she a certain street were just beyond the street's end ; they were really not hills at all, but mountains many miles distant. So at Fort Laramie, it seemed to me that it would pleasantly occupy my morning's few occasions when he has been able to leisure to stroll over to certain snowy recognize what he knows to be the knolls which I could not have reached with less than a day's travelling. RICHARD A. PROCTOR.

Note.—Death has summoned Professor Proctor since he planted the above. He was stricken with yellow fever at New York on the evening of september 12th and expired in great agony. His contributions will be missed from these columns, and tense of thousands of readers will join the Dispotch in mouraling the loss of the most eminent astronomer of modern times.

The Institute of British Architects has reissued the "Hints to Workmen Engaged on the Repairs and Restoration of fashion is coarsely globular in its curva-has most needed hints is the British ar-ture compared with the surface of clouds chitect himself, for between 1864 and which nevertheless looks like a dome. Supposing the cloud surface two miles from the ground, the air being clear because of the cal or artistic interest that they possessed. as the eye can range, the horizon part of alone and kept Mr. Five-per-Cent. in the cloud surface instead of being but order it would indeed have been a bless-

120 miles or 64 times as far away. Here the eye and (through it) the mind are deceived as the mind and eye are deceived about the horizon, sun and moon; only in a contrary way. The horizon sun is judged to be farther away sults."

For Nervous Bebility.

Uss Horsporn's Acid Prosphate.

Dr. A. M. Bilby, Mitchell, Dak., says:

"I have used it in a number of cases of nervous debility, with very good re-borizon sun is judged to be farther away."

MILITARY GENIUS.

ORD WOLSELEY'S ESTIMATE OF THE GREAT CAPTAINS.

Hannibal, Marlborough, Cosar, Napoleon, and General Robert R. Lee-Some

neath. At such times, as also when in- exercised upon the world; and yet if the the five great leaders of men I have Here is nature about to perform her stead of uniform bands, a kind of netlaw of clouds covers the sky toward the law of the virulent small
Work of clouds covers the sky toward the law of the virulent small
Orange had died of the virulent smallmake the sun look egg-shaped. (He in his descending motion passed from is the original Humpty-Dumpty that above to below a layer of clouds unisation a wall—the horizon—and got a formly reticulated, the golden tinge along one at wall—the horizon—and got a formly reticulated, the golden tinge along disgust with the interferences of ministration and edge of each of the cloud streaks so may be said to have saved European liber ty, could have only been kept together by the tact and military genius of Marl-borough. It was his great ability in the field that secured the independence of Holland, that saved Europe from the grasp of the great French King, as she was saved a century later from the ty-ranny of the great Corsican by another

> THE APPROACHING DOOM OF ENGLAND. horizon corresponds to the seemingly immense depth immediately below the aeronaut. Or one may length of the world's history peace and liberty was probably this latter quality that Pompelow the aeronaut. Or one may length of the world's history peace and liberty was probably this latter quality that Pompelow the aeronaut. Or one may length of the world's history peace and liberty was probably this latter quality that Pompelow the aeronaut. Or one may length of the world's history peace and liberty was probably this latter quality that Pompelow the aeronaut. Or one may length of the world's history peace and liberty was probably this latter quality that Pompelow the aeronaut. Or one may length of the world's history peace and liberty was probably this latter quality that Pompelow the aeronaut. Or one may length of the world's history peace and liberty was probably this latter quality that Pompelow the aeronaut. say (though in reality it is saying the same thing) that the mind cannot admit the thought of the immensity of the distribution of the companies of the world. Unduly elated the empire of the world. Unduly elated the thought of the immensity of the distribution of the companies of the world. Unduly elated the empire of the world. Unduly elated the thought of the immensity of the distribution of the companies of the world. Unduly elated the empire of the world. Unduly elated the thought of the immensity of the distribution of the companies of the world. Unduly elated the empire of the world. Unduly elated the thought of the immensity of the distribution of the companies of the world. Unduly elated the empire of the world. When the world is the empire of the world is th tance of the horizon. From a height of half a mile the horizon is some forty occupied in the world and that to which miles away or eighty times further than the earth's surface below, but the mind has since reduced us. Then we sets the horizon only three or four miles were the acknowledged mistress of away (at least if the air is clear) and con- the seas, and our military strength sequently the surface which (regarded gave us a power and influence as a whole is really slightly convex be- in the world which while it was gratilow the observer appears to be markedly fying to our pride helped largely to the creation of this wide empire of ours, and Draw a series of concentric circles, conduced greatly to the good and welthat the circumferences are equally dis- chical democracy lately let loose upon

> > WHAT IS MILITARY GENIUS? descions and callings co nius pure and simple may command suc- of the Confederate army. nowned in any other walk of life. Military genius in its highest sense is a combination of many qualities and pow-Giving ers. A man may shine as an eminent military historian and yet be wanting in some of the simple attributes without which no man can even be a good private soldier. In fact, he need not be a soldier at all. Mr. Kinglake and Thomas Carlyle have shown genius in describing actions in which they had no share. Sir William Napier, though a soldier, made his type of genius most felt as a military historian. Jomini, the greatest of writers on tactics, never held any independent command in war.

VON MOLTEE. all-absorbing joy of success or by the depressing influences of passing failures is a rare gift. But it is guite possible that such a strategist, if carried from the safe position of army headquarters, and pushed into the midst of excitement and of peril, and of all the emotions and startling sensations which such a position occasions, might

and come to the right conclusion. WELLINGTON. I would instance Cresar, Hannibal, Marlborough, Napoleon, and General Lee as men who possessed what I regard as the highest development of military strategic grasp of Von Moltke and the calm wisdom and just reasoning power of Wellington all the power of Marshal Bugeaud and of Souwaroff to inflame the imagination of their soldiers and impart to them some of the flery spirit of reckless daring which burned within their own breasts. The personal magnetism which such great men possess so largely, and can without effort to-day. impart to others, was, I think, wanting in our "Iron Duke." The marvelhis army into gentlemen and common

ism of his regimental officers, the sons of English squires, and younger sons of what was then called our aristocracy. He seldom, if ever, spoke in appreciative terms of those brave soldiers who carried him in triumph from Lisbon to Toulouse, and if he had any affection for them he never showed it. He believed that when restrained by the most rigor-I have said that this illusion of a deeply-arched instead of a nearly-flat sky is occasionally broken. Frobably but a small proportion of those who read these lines have ever noticed the sky surface looking flat. I have observed the appearance myself three or four times during my life, but then I have always been on the lookout for it, this particu
and General Robert R. Lee—Some

Comparisons.

(Wolsstey in Fortnightly Review.)

(Wolsstey in Fortnightly Review.)

As nations have been destroyed by individuals, so, too, they have been crelians, the blackguards of every English the said that all the great political and be said that all the great been on the lookout for it, this particular illusion having long had great inteby false impressions even when we know the real state of the case, so that nature may in some sense be compared with a conjurer who explains the trick he is

NAPOLEON.

Now let me take Cæsar. What few men not soldiers realize is that quality which Casar showed when defeated by no fault of his own at Dyrrhachium, or when, after almost all the world had deserted him because of his apparent fail-ure in Spain, he changed the history of the world by his calm facing of misfortune, and his power of using his know-ledge of men, and his military skill unand his want of steadfastness lost him and waving in the evening breeze.

part of his life perhaps more perfectly brings out the varied qualities which rough's genius than the campaign of

And lastly, let me glance at General Lee. Lee's strategy, when he fought in all foreign aggression. Our recent naval defence of the southern capital, and manœuvres will certainly cause all Euthreatened and finally struck at that of defence of the southern capital, and the United States, marks him as one of if they do not open the eyes of our own electorate to the disagreeable truths long other age. No man has ever fought an other age. No man has ever fought an up-hill and a losing game with greater firmness, or ever displayed a highfirmness, or ever displayed a high-er order of true military genius than he did when in command cess, but genius alone does not make the knowledge of his profession displayed great commander. When leadership and by General McClellan was considerable, responsibility in war are conferred upon a man devoid of sound common sense, tact, good temper, and good health, sim-

their day. The present age is one of large masses of fairly-trained soldiers, but it is by no means certain to me that the time may not yet come again when all nations will once more resort to small standing armies of the most highly trained and disciplined soldiers. may find that the soldier, to be at his best, or to be even thoroughly efficient, will require such long and, above all things, such constant training, that an army consisting of a people in arms will be impossible. In fact, we may find out by and by that a comparatively small standing army of carefully selected men. the flower of the nation, highly skilled in all manly exercises, in all military Field-Marshal von Moltke's character | arts, and kept in a constant state of per is so simple and winning and his military feet training, is a more effective weapon genius of such a high order that it is for fighting purposes than the slowmost probable he would have become a great leader of men in the field had any such command ever devolved upon him.

At the same time it is quite possible that military arts and sciences in all their even Moltke does not possess the qualities which made the "Tenth Legion" phases, that the heaven-born genius can be converted into the successful comlove Cesar, and which made the Roman mander. Not even Jomini was more tho-one of the few great leaders of armies roughly conversant with all the great whom the world has ever known. Great campaigns of Casar, Hannibal, Te-coolness of head and sternness of nerve renne, Marlborough, and Frederick the are required by the general whose ex- Great than Napoleon was. Yet what is eral large armies in motion, each on its war teaches us? All those whose names own line, but each and all moving as the will be forever remembered in connecsay the relentlessness-of disposition soldiers. Lee and Grant, Stonewall which enables such a man to do his Jackson, Sherman, McClellan, Sheridan, daily work unaffected either by the Longstreet, Johnston, Hill, and a host of others, whose names are and will

An Artist's Gallantry to His Wife.

George A. P. Healy, the artist, who enjoys the distinction of having painted then be unable to exercise the quick- the portraits of more royalties, celebriness of apprehension and the soundness ties, and beauties than any living artist, of judgment that can alone enable a has been spending the summer in this, man in that position to duly weigh the his native land. He came over in June circumstances, analyze the situation, from Paris, where his home is, and has since then travelled 18,000 miles in the Yellowstone Park, Alaska, Wyoming, Oregon, and all that wild, wonderful Mr. Healy is a most brilliant talker, and if he entertains his "sitters" as well as his friends it is no wonder his genius-men who combined with the art is in such demand. Mr. Healy has painted more than a hundred portraits, including the shining lights of the pulpit, the bench, and the bean monde. When asked a short time ago if he dared tell whom he considered the most beautiful woman he had ever painted he replied: "The most beautiful woman I ever saw was the mother of my children." Mr. Healy returns to Europe

At the Paris Exposition of 1889 a spelous magnetic power of the great gene-rous leader (Napoleon) over his men was will be made of the sword in all its certainly undervalued by Wellington branches, General Gervals is forming a He seems in his mind to have divided retrospective exhibition to show the hisretrospective exhibition to show the history of fencing, and appeals to amateurs exists under Findlay to day. men, placing a great unbridged guif be-tween the two classes. With one or two exceptions he apparently had the very paorest opinion of the military capacity of his generals of division, while he be-lieved with all his cold heart in the dash, courage, endurance, loyalty, and patriot-

A RARA AVIS.

OUR VIRGINIA SCRA-WHAT IT IS AND HOW KILLED.

Its Habits - Some of the Superstitions -A Description of a Hunt. WEST POINT, VA., Sept. 22, 1888. To the Editor of the Dispatch:

may not be out of place. What is his proper name, whence does he come, and whither disappear so suddenly and mysteriously? In our State they are known as sorn. A Western-Shore-of-Maryland man would swear by the shades of bis forefathers that it is an ortalan, an Eastern-Shore or Delaware citizen would aver on a stack of Bibles that it is the rail-bird or water-rail, and a Carolinian would stake his last dollar that it is the rice-The fact is it is identically the bird. same bird with the name varying according to the locality. "A rose by any other name," etc., and a som with any other appellation is the same delicate and delicious edible. They work of clouds covers the sky toward the place of the horizon sun, an effect of foreshortening is produced which brings out the horizontality of the cloud surface—that is, not of the surface of individual clouds, but of the general layer.

A BEAUTIFUL HAUSION.

I remember one occasion when I was travelling across the western prairies, toward the time of sunset, that as the sun in his descending motion passed from family pressed him to take, or after Taltop. After one or two frosts they disappear as suddenly as they came great fall—&c., &c.—no common henlaid egg answers that Old World connus and so the kindly instructive persons who wrote "Sandford and Merton"
for the confusion of intelligent childhood, carefully explain that it is the rehood, carefully explain that it is the rethe setting sun even as the refracting colored man and brother has a legend the setting sun, even as the refracting only time in my life I was not only able the setting sun, even as the refracting only time in my life I was not only able the setting sun, even as the refracting sun, even as the refraction only time in my life I was not only able the setting sun, even as the refraction only time in my life I was not only able the same and the noiseless pinions, wings his aerial flight to sunnier climes than ours. The best time to shoot them is on a very high tide, and if the day is cloudy haps, a little drizzly so much the better. There is no class of hunting more keen-ly enjoyed by good shots, and they would not forego the pleasure if they saw six agues grim and gaunt staring at them in every marsh. The tide is just That in two such remarkable epochs disturbed by the accidents of fate. It right, and in our little skiff, impelled by was probably this latter quality that Pom-pey, himself no mean strategist, lacked, low line of beautiful marsh-land, green sently a good opening appears and the little craft glides in among the reeds and wild cats. Our pusher lays down his paddle, bares his sunburned and brawny arm, and takes the pushing-pole, an arm, and takes the pushing-pole, an arm, and takes the pushing-pole, an arm, and takes the pushing-pole, and arm, and takes the pushing-pole, and arm to be supported by the life pushing more parfectly. end, and strikes on the side of the boat.

It is answered by innumerable chirrado river, in the eastern end of San Berwent to make up the sum of Marlbo- rups of the unsuspecting sora. All nardine county. For the past two months right, he says, and soon the woods a strange disease has attacked memrough's genins than the campaign of right, he says, and soon the woods a strange disease has attacked fined.

Blenheim and the diplomatic labors with and hills are echoing back rounds bers of the tribe, who live in a which mean death and destruction to an state of semi-barbarism. The victime and statesmanlike political grasp of the whole situation is easily applicable. After about two hours below the tide begins to fall aches, purging, and a gradual stiffening grasp of the whole situation is easily appreciated by the careful reader of his life. But what Marlborough was on the field of Blenheim itself, how in the modern toothsome dames lying in the local toothsome dames lying in the local toothsome dames lying in the local toothsome for the limbs. In many cases the sufferer showed all the symptoms of poisoning.

green leaves, then again out into him.

the channel in the mellow rays of the setting sun. Our pusher becoming loquacious after taking something out of the tribe became panie-stricken and a flask (not the one which contained the slaughtered their dogs and burros as a burnt the vessels belo

Sweet Teviet by thy slivery tide
The glaring vale-fire gleanus no more;
No longer mail-clad warriors ride
Along thy wild and willowed shore.
Where'er then wind'st by dale or hill,
All, all is peaceful, all is still,
As if thy waves since time was born,
Since first they rolled upon the Tweet,
Had only heart the shapher dis reed,
Nor started at the bugle horn.

F. C.

Letter from an Expert. SEPTEMBER 15, 1888. To the Editor of the Dispatch:

Dear Sir,-I have been the recipient so many favors from your valuable paper that I feel a reluctance to ask any more, but the Dispatch, above all other papers, has always so generously allowed ts columns to be the medium for the difthis State, and this encourages me to ask you to publish this letter, as it seems you to publish this letter, as it seems there is scarcely anything in the heavens above or in the earth beneath that mankind are not ready to pervert.

kind are not ready to pervert.

Science is an essential to our pursuits or cabin. But a final test was to be made, with yells and imprecations the made. With yells and imprecations the final test was to be made. With yells and imprecations the final test was to be made. fined science to be a certain unquestionable knowledge derived from or founded | place where the council had been held upon Nature's laws equally certain, but the knowledge must not be based upon sophistical, Utopion principles, as all the ntegral parts of nature have a beautiwhen man dares to question the workmanship of his Maker that the error is not in the celestial machinery, but in the

earthly observer. There are some things in nature that must and will remain a mystery to the most intelligent investigators to the end of time, as human knowledge has bounds beyond which it cannot pass, while universal and unerring knowledge is for God alone, and as the far-fetched inequitable article published in the Dispatch a short time ago headed "Caverns of Burning Gas" is calculated to overawe not only the people of Findlay, O., but also the people of this community, as there is irrefutable evidence that as high a pressure of natural gas exists within fourteen miles of Bichmond as exists at the best places at Findley, O., and as this obfuscate subject is of such vital importance not only to the people of Findley, O., but to the people in this community, I respectfully ask the learned rolessor of Heidelberg University (Dr. Ernest Weissenbauer) to discuss the matter with me through any unbiassed channel he will select, when I will undertake to prove not in any esot-ric, obscure way, but prove by truthful commou-sense practical facts that the learned Prosessor's theory as to the burning caverns of gas under Findlay, Ohio, are nothing more or less than a phantom, and if the Mayor of Findlay nd the people feel alarmed at the startling statements of Professor Weissenbauer and wish the matter thoroughly tested I will meet the Professor on the spot and prove to the entire satisfaction of every man of common sense in Find-lay that while the high-pressure naturalgas does doubtless exist-and fortunately, too-that no caverns of burning gas do exist under Findlay, and in all probability never will exist unless caused by some spontaneous agency, and the constant high-pressure gas there now is sufficient evidence to any man possessing

Very truly yours,
JOB ATRINS, Mining Engineer.

To the Editor of the Dispatch:
From reading the numerous criticisms which have recently appeared in regard

to the Mercie model of Lee I am convinced that some of them are, to say the least, a littled strained.

A writer, in a communication days ago to the Dispatch, signed "H.," took issue with the Governor's interpretation of the artist's idea as expressed in the model. The Governor thinks the the model. The Governor thinks the artist intended to represent the General as returning the salute of his troops, while his eyes are seeking in the distance a weak spot in his enemy's lines upon which to direct an attack, and "H." thinks this is an attitude the General would not be likely to assume It was the writer's fortune on Now that the season for shooting the sora (Rallus Aquaticus) is upon us a few remarks about this curious little bird sume. It was the writer's fortune on

one notable occasion to be in a position to observe General Lee in almost the identical attitude the Governor suggests. The early morning of May 12, 1864, was selected by General Grant to assault the Confederate lines near Spotsylvania Courthouse at the point designated as the Horseshoe, and Hancock at dawn threw a heavy column against our entrenchments and succeeded in breaking our line at that point, capturing General Edward Johnson and almost the whole of his division of infantry and about twenty pieces of artillery. What slender re serves the Confederates had were hurried to the point of attack, meeting on their way thither the defeated and wounded soldiers of the force which had attempted to resist Hancock's overwhelming assault. The morning was chill, damp, and misty, the smoke of the guns clinging close about the ground and giving to the forms of the broken soldiery, seen at a little distance moving through it, a weird and ghostly appearance. The advancing col-umn hurried along the muddy field with steady determination but scant speech, for they were upon "the perilous edge of battle," and face to face with a great At this moment General Lee, hat in

hand acknowledging the cheers of his trusty veterans, unattended by any staff, rode past the moving column, erect, calm, self-possessed, but with eyes looking beyond the marching troops and intently fixed on the point of attack from which arose the unmistakable sounds of the terrible conflict. I am convinced it will be wellnigh

impossible for any artist to portray the form and features of our incomparable captain exactly as he lives in the memory of his devoted followers, for his was a combination and a form indeed where every God did seem to set his seal to give the world assurance of a man."
So we must be satisfied with the work of the artist if he makes a near approach to the "counterfeit presentment" of so illustrious a subject. HOWITZER. BURNED AT THE STAKE.

Sad Fate of an Indian Maiden Found Guitty of Witcheraft, A San Francisco special says: The ments of apparent ill success and failure bottom of the boat. To be strictly four hours from the time of attack. It truthful, your correspondent, being a said that at least twenty of the most wretched shot, never killed but one in popular men in the tribe have died from assured the victory—this may be re-corded, but here, as elsewhere, I believe took both barrels of a gun to complete men of the tribe belabered the patients that not one man in a thousand who reads of it realizes what it implies. the job. As it was rather late in the out of the burning body, and in the case Homeward bound we glide of Stone Head, a sub-chief, the frenzied along the beautiful Pamunky, sometimes doctors dragged the patient through the in the shadow of banks overhung waters of the Colorado for the purpose with vines just beginning to show of cleansing him of the evil spirit which the first tints of autumn on their it was supposed had taken possession of

> army in his memorable raid during the in the last quarter. Every buck in the war, and other interesting items in reference to those dark and stormy times. Everything now being so quiet, peace-ful, and still, we are forcibly reminded of Scott in his Lay of the Last Minstrel: The medicine-men watched the steamwith herbs, while the bucks were squating herbs until the mess had been beited down to a teacupful of liquid. Then a male pigeon and his mate were taken from a wicker basket and held by the medicine-men while the liquid from the herbs was poured down their throats. The male bird, when re-leased, flew away and was not seen again. The female bird fluttered a few yards and then fell helpless and dying on the ground. The medicine-men now seemed crazed with excitement. They leaped to their feet and danced, while the bucks sat in sullen silence. While the medi-cine-men were in the midst of their orgie they declared that there was a witch in the tribe. The female usion of knowledge and for the good of bird had flown away into the night. When the bucks heard the words of among the herbs and grasses. The squaws were driven in single file with the medicine-men watching with ner vous excitement the face of each as she Nearly all the women passed the pigeon without giving it any no-

> crringly expressive in all their varied gradations, and it will always be found like snow in the bright moonlight. tice. Finally a young squaw, the daughter of Cresco, also a sub-chief, stepped out of the ranks, and was about to pick up the bird when the medicine-men, with loud yells, seized the girl and pinioned her arms. The unfortunate squaw pleaded piteously for her life, which she seemed to foresee was in peril, but her cries were of no avail, her own relatives assisting in dragging her to the council place. The death of the female pigeon was conclusive evidence that a squaw was the witch. The first squaw to touch the bird was the fatal test of guilt. The poor girl, who was but eighteen years old, was strip-ped of her clothes, tied to a stake, and a slow fire built under For two hours she lingered in awful agony, and while her death-screamsfilled the air the braves danced about and the medicine-men muttered incantations. When morning came nothing but the whitened bones of the girl and the blackened embers of the fire remained about the stake. The disease from which so many of the Mojave braves have died is believed to be malignant typhoid-fever. The details of this strange story were brought to Los Angeles to-day by ranchers who had been attracted to the camp of the Indians by the noises which attended the terrible death of the girl. Lemon Elixte. ITS WONDERFUL EFFECT ON THE LIVER, STOMACH, BOWELS, KIDNEYS, AND BLOOD,

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W. A. James, Bell Station, Als., writes: I have suffered greatly from indigestion or dyspepsia. One bottle of Dr. H. Mezicy's Lemon Elixir did me more good than all other medicine I have ever taken.

MAJOR WILLIAM WARNER,

Grand Army of the Republic. In National Encampment assembled, at Columbus, Ohio, the Grand Army of the Republic has elected William Warner of Kansas City, its commander-in-

Major William Warner is one of the



is a native of Wisconsin, and was born in 1841. After being a student at the Lawrence University, in his native State, he entered Michigan University. He was pursning his law studies when the civil war broke out, and he enlisted as a private in the Eighty-third Wisconsin regiment, served as adjutant and captain of the same regiment, and subsequently was assistant adjutant-general to General A. J. Smith. The young soldier was mustered out at the age of twenty-three in August, 1865, as major of the Forty-fourth Wisconsin.

twenty-three in August, 1865, as major of the Forty-fourth Wisconsin.

Major Warner was invited by an autographic letter from President Lincoin to go to Washington and accept the position of captain and assistant adjutant agreement in the regular army. Refusing

tion of captain and assistant adjutantgeneral in the regular army. Refusing
this, he settled in Kansas City in 1866,
and his career has been upward and onward ever since.

He organized the first Grand Army of
the Republic post in Kansas City in
1876, and subsequently reorganized the
department in 1882, and was its first
department commander, to which office
he was twice elected. In 1867 he was
elected city attorney of Kansas City,
and in the following year became a
circuit attorney of the State. Four circuit attorney of the State. Four years after, in 1871, he was elected mayor of Kansas City, and was a presidential elector in 1872. Major Warner was elected United States Attorney for President of the Beard of Warner was elected United States Attorney for PERSONAL. was elected United States Attorney for the Western district of Missouri in 1882, and has since held that office. In 1883 he received the votes of the Republican members of the Missouri Legislature for United States senator, and being a candidate for representative he was elected to the Forty-ninth Congress as a Republican, defeating Alexander Graves. He is a momber of the Committee on Claims is a momber of the Committee on Claims. The the Western district of Missouri in 1882, Colo- and has since held that office. In 1883 and on Expenditures in the War Department.

Major Warner has always been prominent in the Grand Army, and has been identified with its growth in the West. He has held the highest office in the Department of Missouri, as stated above, and in 1883 he was elected senior vicecommander-in-chief, and was a prominent candidate for commander-u in 1884, being then championed by General Sherman.

The Lust Assembly. (Published by request.) The bell has rung; we hurry To our piaces near the stairs, And we file slowly upward. Thinking not of daily wares, But of dreams long since departed And of forms and faces dear Who have reached the shining portals And left us lingering here.

Yeat 'tis over. All the hum-drum Of our school-life new will cease. All the worryings and the scoldi-Have just given war to peace. Yet it is with feed affection. Timt I gaze upon the door And see the marks of pendis. Written there in days of yore.

I was dreaming, fendly dreaming of the girls who soon would pass. Through that doorway, and be ushered. Into life, where cares harass And trouble and perplex us, And we long for dear old days. Vhen we gathered in assem! And sang our simple fays.

Twas a quaint old thing, the singing of the girls and boys who now Ere this, maybap, hear ringing Joyons bells of fame. We how At their feet, and render homage To the men and maidens fair, Who have listened of and often To the chanting of our prayer.

I was musing when the fair arms a was musing when the fair arms
Of some friend had clasped me tight,
And who whispered, "Cease your dreaming
Else you will be late; yes, quite."
And when turning round I saw
That I of failen no her care
For protection, cheer and comfort,
'Twas my Kate with golden hair.

But the bell has ceased its ringing, And we one our Bibles, where
We are lead by our dear teacher.
There we sing our Father's prayer.
And while singing there stole o er me
A feeting of recose.
A sabbath evening stillness.
Like when day is just to close.

It was sweet to muse o'er pleasures.

It was sweet to muse or pleasure
It was said to think of pain
Which we felt within these halls
We may never see again.
Yet! I think that sadder far
Were the words! had to say:
"Fannie, did you notice?
"Tis the last assembly day." When the bell rang for dismissal And we passed on to our class, I felt as it the disrest friend I have had just then passed Away from life. But in the future, When I've turned back Memory's book, I shall read upon her pages How the last assembly looked.

How fuille were my efforts
To reduce my thoughts to rhyme,
Yet the muse bas seemed to urge me
Onward 'dill reachest the line
Where the music seems so wildly
And so strangely weirdly sweet,
That I lay my last assembly
At the Muse Erato's feet.
Exercis. S. B.

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